LEGISLATIVE SERVICES AGENCY OFFICE OF FISCAL AND MANAGEMENT ANALYSIS

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FISCAL IMPACT STATEMENT

LS 6656 NOTE PREPARED: Feb 17, 2009 **BILL NUMBER:** HB 1347 **BILL AMENDED:** Feb 12, 2009

SUBJECT: Various Energy Matters.

FIRST AUTHOR: Rep. Dvorak

BILL STATUS: As Passed House

FIRST SPONSOR: Sen. Merritt

FUNDS AFFECTED: X GENERAL IMPACT: State & Local

DEDICATED FEDERAL

<u>Summary of Legislation:</u> (Amended) *Renewable Energy Technology Manufacturer Tax Credit*: This bill provides a credit against state tax liability beginning January 1, 2011, to taxpayers that manufacture or assemble certain renewable energy technologies. It provides that the Indiana Economic Development Corporation (IEDC) makes credit awards for the manufacture or assembly of renewable energy technology. It also provides that the IEDC may not make a credit award for the manufacture or assembly of renewable energy technology after December 31, 2012.

Business Renewable Energy Investment Tax Credit: The bill provides a separate credit against state tax liability beginning January 1, 2011, to business taxpayers that make capital investments in renewable or alternative energy technology. It provides that the IEDC makes credit awards for capital investments in renewable or alternative energy technology. The bill provides that the IEDC may not make a credit award to business taxpayers that make capital investments in renewable or alternative energy technology after December 31, 2012.

Net Metering: This bill also requires the Indiana Utility Regulatory Commission (IURC) to adopt emergency rules amending the IURC's net metering and interconnection rules for electric utilities. It provides that the amended rules must:

- (1) make net metering available to certain specified customer classes;
- (2) allow a net metering customer to interconnect a generating facility with a nameplate capacity of one megawatt or less to the distribution facility of an electric utility; and
- (3) allow a net metering customer to interconnect a generating facility that makes use of certain specified technologies.

The bill provides that the existing rules are void to the extent they do not comply with the requirements for the amended rules. It provides that the amended rules do not apply to rural electric membership corporations. The bill also requires the IURC to report to the Regulatory Flexibility Committee on the IURC's progress in adopting the amended rules.

Effective Date: (Amended) Upon passage; January 1, 2010.

Explanation of State Expenditures: (Revised) *Department of State Revenue (DOR)*: This bill will increase expenditures for the DOR by requiring the DOR to amend forms, adopt rules and procedures, and update computer software to incorporate the tax credits established in this bill. The current level of resources should be sufficient to implement these provisions.

(Revised) *IEDC*: The IEDC will realize administrative costs in forming agreements to award tax credits to certain taxpayers as well as monitoring compliance with the credit awards agreement. Additionally, the bill requires the IEDC to evaluate on a biennial basis, the effectiveness of the Renewable Energy Technology Manufacturer Tax Credit program (established in this bill) in creating new jobs and increasing wages in Indiana. The amount of increased expenditures is indeterminable, but it is estimated that the IEDC could implement these provisions through the use of existing staff and resources.

IURC: This bill requires the IURC to adopt rules on net metering and interconnection of electric utilities and report to the Regulatory Flexibility Committee on its progress in adopting the rules. It is estimated that the IURC will be able to implement this provision with its existing level of resources.

State and Local Government Utility Expenditures: The bill includes state and local governments in the class of electricity consumers which must be offered net metering services. Under current IURC rules (170 IAC 4-4.2) investor-owned electric utilities (IOEU) must offer net metering to residential customers and K-12 schools that install a net metering facility. Currently, IOEUs may, but are not required, to offer net metering to state and local governments. The bill would require all electric utilities to offer net metering to state and local governments, as well as other customer classes as listed in the bill. To the extent that any governmental entity chooses to utilize net metering, there could be a decrease in that entity's electric utility expenditures. The impact will ultimately depend on the amount of revenue the state or local agency can generate through the sale of renewable energy back to an electric utility. The amount of this revenue will be impacted by the current use of the renewable energy by the state or local agency. If the governmental entity currently uses the renewable energy to supplement electricity use, the overall impact will be determined by the difference between the value of the current use of that energy versus the price the energy may be sold back to the electric utility.

<u>Background Information on Net Metering</u> - As stated by the U.S. Department of Energy, "net metering allows consumers to offset the cost of electricity they buy from a utility by selling renewable electric power generated at their homes or businesses back to the utility. In essence, a customer's electric meter can run both forward and backward in the same metering period, and the customer is charged only for the net amount of power used."

As used in this bill, the term "electric utility" does not include rural electric membership cooperatives (REMCs).

Explanation of State Revenues: (Revised) Summary- This bill establishes two tax credits: the Renewable

Energy Technology Manufacturer Tax Credit and the Business Renewable Energy Investment Tax Credit. The bill would decrease state revenues by an indeterminable amount. The extent to which revenues would be reduced will be determined by the number of credits awarded by the IEDC and the amount of the approved entities' investment. For information on estimated costs of some types of renewable energy investments that would qualify for the tax credits, see the *Background Information on Renewable or Alternative Energy Technology* section. The bill provides that the IEDC may not approve an application for a credit award after December 31, 2012. However, taxpayers can still carry forward their unused tax credits after this date. Since both tax credits are effective beginning in tax year 2011 for qualified investment made beginning in 2011, the fiscal impact likely would not begin before FY 2012.

(Revised) Renewable Energy Technology Manufacturer Tax Credit: This bill establishes the Renewable Energy Technology Manufacturer Tax Credit allowing taxpayers to receive tax credits up to 15% of qualified investment in the manufacture or assembly of renewable energy technology in Indiana. The bill defines the various investment expenditures that qualify for the tax credit. Additionally, the bill provides that a taxpayer is not entitled to claim the tax credit if the taxpayer relocates from one site in Indiana to another site in Indiana. The credit may be taken against the Adjusted Gross Income (AGI) Tax, Financial Institutions Tax (FIT), or Insurance Premiums Tax liability and may be carried forward as determined by the IEDC, not to exceed nine consecutive years.

(Revised) Business Renewable Energy Investment Tax Credit: This bill also establishes the Business Renewable Energy Investment Tax Credit, allowing business entities to receive tax credits up to 10% of qualified investment in renewable or alternative energy technology. The bill defines the various investment expenditures that qualify for the tax credit.

The credit may be taken against the AGI Tax, FIT, or Insurance Premiums Tax liability and may be carried forward as determined by the IEDC, not to exceed nine consecutive years. Entities receiving the tax credit must agree to remain at that location for a ten-year period. The bill provides the tax credit for proposed investments located in Indiana and consisting of depreciable property that implements a renewable or alternative energy technology. The credit applies only to qualified equity investments made on or after the date the business entity submits an application to the IEDC.

Revenue from the AGI Tax on corporations, the FIT, and the Insurance Premiums Tax is distributed to the state General Fund.

(Revised) <u>Background Information on Renewable or Alternative Energy Technology</u>: Solar energy could be utilized for electricity and thermal energy. Because of the lack of annual solar radiation, Indiana would have more use for flat-plate collectors for low-temperature requirements than for grid-connected solar projects. Flat-plate collectors can be utilized to heat swimming pools, domestic water, and provide spatial heating in buildings. These systems are estimated to cost between \$1,500 to \$3,000.

According to the American Wind Energy Association, the estimated cost of construction for a wind energy system can range from \$6,000 to \$80,000. The cost is determined by class and size of turbines, as well as wind speed. Because wind power is highest during the winter and spring and lowest in the summer in Indiana, wind energy may be a better source for heating rather than cooling.

Anaerobic digestion systems use organic waste to produce gases that are burned as fuel to produce electricity. The cost of installing a biomass system depends on the size and type of the unit purchased. A 20-kilowatt

system may cost approximately \$7,500 to \$18,000.

Geothermal heat pumps use the constant temperature of the earth as the exchange medium instead of the outside air temperature. This allows the system to reach fairly high efficiencies (300%-600%) on the coldest of winter nights, compared to 175%-250% for air-source heat pumps on cool days. On average, a geothermal heat pump system costs about \$2,500 per ton of capacity, or roughly \$7,500 for a 3-ton unit (a typical residential size).

According to the U.S. Green Building Council's website, the LEED rating system was created to provide the building industry with consistent, credible standards for what constitutes a green building. The rating is determined by earning points in a number of categories, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design. Projects are awarded Certified, Gold, Silver, or Platinum certification depending on the number of benchmarks met.

To achieve the Green Building Initiatives Two Globes rating, a building must be assessed by an independent third party that is affiliated with the Green Building Initiative. Out of 1,000 points possible, the building must achieve 550-690 (55%-69%) of the points to be recognized with two green globes. The most globes a building can receive is four. Areas evaluated include energy, indoor environment, emissions and effluents, resources, environmental management, and water.

Explanation of Local Expenditures: See *State and Local Government Utility Expenditures* section under *Explanation of State Expenditures*.

Explanation of Local Revenues:

State Agencies Affected: DOR; IEDC; All.

Local Agencies Affected: All.

Information Sources: (Revised) U.S. Department of Energy website;

http://www.eere.energy.gov/states/alternatives/net_metering.cfm. Indiana Renewable Energy Resources Study, 2007; U.S. Department of Energy, *Energy Efficiency and Renewable Energy, Annual Report on U.S. Wind Power Installation, Cost and Performance Trends: 2007*; American Wind Energy Association, http://www.awea.org; National Climatic Data Center; U.S. Green Building Council, http://www.usgbc.org/; The Green Building Initiative, http://www.thegbi.org/home.asp.

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